

PIN37

AN EXAMINATION OF THE CORRELATION BETWEEN QUALITY OF PATIENT CARE AND PATIENT RACE OR SOCIAL CLASS IN INPATIENT APPENDICITIS CASES

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OBJECTIVE: It is the purpose of this study to examine the relationship between hospital stays and a patient's race or social class with respect to the occurrence of appendicitis. These cases are drawn from the Health care Cost and Utilization Project of the 2004 Nationwide Inpatient Sample (NIS). **METHODS:** We consider three outcomes: the amount of total charges the patient incurs; the length of the patient's stay; and whether or not the patient died. The sample was taken from 12,432 inpatient appendicitis cases from a 10% sample of the NIS. We used Kernel Density Estimates and multiple Logistic Regression Analyses to examine outcomes versus patient demographics and risk factors. Linear Regression Analysis examined charges and stay. **RESULTS:** Patients in the second income quartile had the lowest total charges, but the highest rate of death. White patients had some of the lowest total charges, but again, the highest rate of death. There was no direct relationship between Patient Death and Race, Zip Code Income Quartile, Insurance or Primary Diagnosis. There was also no relationship between Length of Stay and Race, Zip Code Income Quartile, or Insurance. The Primary Diagnoses found to be directly related to Length of Stay were Rectosigmoid Junction Malignant Neoplasm, Volume Depletion, Hypopotasemia, Unspecified Anemia, Unspecified Congestive Heart Failure, Acute Appendicitis with Generalized Peritonitis, Acute Appendicitis with Peritoneal Abscess, Other Specified Gastritis, and all others combined. The remaining diagnoses—Pure Hypercholesterolemia and Diaphragmatic Hernia—were both inversely related to Length of Stay. However, no direct correlation may be seen between to lower the quality of health care and minority race or lower social class. **CONCLUSION:** In the end, it seems that demographic characteristics have little or no effect on quality of care in appendicitis cases. Length of Stay is largely determined, not surprisingly, by the patient's primary DRG code.

INFECTION—Patient-Reported Outcomes

PIN38

RANDOMIZED CONTROLLED TRIAL OF TELEPHONE, EMAIL AND TEXT MESSAGING REMINDERS ON PATIENT COMPLIANCE WITH ANTIBIOTIC REGIMEN

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OBJECTIVE: Using the Health Belief Model (HBM) as a conceptual framework, this study tested whether telephone, email, or cell phone text messaging follow-up increased patient compliance with prescribed antibiotic therapy. **METHODS:** A randomized controlled trial was employed in a convenience sample of 201 patients receiving a new prescription for a 10-day oral antibiotic at a university student health center pharmacy. Subjects first completed a survey on their health beliefs about antibiotic-taking. They were then randomized into one of three intervention groups (telephone, email or text messaging follow-up) or a control group. Those in the intervention groups either received a telephone, email, or text message reminder on the 4th day of the antibiotic regimen. On the 9th day, every subject was interviewed over the phone on their antibiotic-taking behaviors. Compliance was defined as at least 90% of antibiotic consumption. Chi-square and logistic regression analyses were used to assess the relationships between explanatory variables and subjects' compliance with

antibiotic regimen. **RESULTS:** One hundred and forty one subjects completed the study (telephone group = 30; email group = 35; text messaging group = 33; control group = 43) with the subject's average age being 20.4 ± 2.1 years. Of those who completed the study, 75.9% complied with their antibiotic regimen (telephone group = 86.7%; email group = 68.6%; text messaging group = 72.7%; control group = 76.7%). No statistically significant differences were found in compliance rates between the four groups. However, subjects with lower perceived barriers (e.g., side-effects, regimen inconvenience), higher self-confidence, and greater intent in following the doctor's directions were more likely to comply with their antibiotic regimen ($p < 0.05$). **CONCLUSION:** Although the compliance interventions in this study had a weak statistical effect on patients' antibiotic compliance, assessment of the HBM components is useful in detecting patients at high risk of medication non-compliance.

PIN39

ROLE OF DRUG DISTRIBUTION STRATEGIES TO IMPROVE HEALTH OUTCOME IN HIGH RISK PATIENTS

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OBJECTIVE: The objective of this study was to examine the effect of drug distribution methods, insurance type, and pharmacy access on antiretroviral adherence and persistence scores in HIV+ patients. **METHODS:** A longitudinal, retrospective study of patients ≥ 18 years old receiving antiretroviral therapy from January 1, 2004 to June 30, 2006 was collected from an independent pharmacy in Houston and followed for a period of five refills. Data collected included: demographics, drug distribution method (pick up vs. delivery), insurance type (public vs. private), and distance from pharmacy. A modified medication possession ratio was used to calculate adherence and persistence scores. Differences in adherence and persistence scores by groups were evaluated by conducting t-tests. The association between adherence and persistence scores with distance from pharmacy was analyzed using Spearman correlation analysis. **RESULTS:** Of 181 patients included in the analysis, 50% were male, average age 38.0 (SD10.6) years. Patients who had medications delivered to their home (62%) had significantly greater adherence (95% vs. 81%, $p < 0.0001$) and persistence scores (78% vs. 51%, $p < 0.0001$) compared to those that picked up their medications. For patients who had public insurance (64%) and those who had private plans (36%), adherence (91% vs. 93%, $p = 0.210$) and persistence scores (67% vs. 68, $p = 0.921$) were similar. There were no significant associations between adherence ($r = -0.19$, $p = 0.11$) and persistence ($r = -0.133$, $p = 0.0776$) with distance from pharmacy. No differences in adherence were seen for gender, age, or drug class, either. **CONCLUSION:** Medication delivery services increases adherence to antiretroviral therapy in HIV+ patients. These results were significant, irrespective to the insurance type they had or the distance of the pharmacy from a patient's residence. Further research should be conducted to evaluate how such drug distribution strategies can be implemented universally and the economic impact on cost of care.

PIN40

ASSESSMENT OF THE CROSS-CULTURAL VALIDITY OF AN HIV SYMPTOM DISTRESS MODULE IN AN INTERNATIONAL HIV CLINICAL TRIAL

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OBJECTIVE: To assess whether the Symptom Distress Module (SDM) developed by the AIDS Clinical Trial Group showed